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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/764,620	01/26/2004	Michael R. Rice	8201/SYNX/JB	8920
41161	7590	12/13/2005	EXAMINER	
DUGAN & DUGAN, PC 55 SOUTH BROADWAY TARRYTOWN, NY 10591			KASENGE, CHARLES R	
			ART UNIT	PAPER NUMBER
			2125	

DATE MAILED: 12/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/764,620	Applicant(s) RICE ET AL.	
	Examiner Charles R. Kasenge	Art Unit 2125	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>11/7/05, 8/31/05</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Allowable Subject Matter

1. The indicated allowability of claims 1-23 is withdrawn in view of the newly discovered reference(s) to Barto et al. U.S. Patent 6,564,113, Allen, Jr. et al. U.S Patent 6,763,277 and Christensen et al. U.S. Patent 6,431,814. Rejections based on the newly cited reference(s) follow.

Information Disclosure Statement

2. The information disclosure statement filed 11/7/05 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. References with a line drawn by the Examiner through citation have not been considered.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barto et al. U.S. Patent 6,564,113 in view of Allen, Jr. et al. U.S Patent 6,763,277 and Christensen et al. U.S. Patent 6,431,814. Regarding claims 1-23, Barto discloses a method of managing work in

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progress within a small lot size semiconductor device manufacturing facility (abstract) comprising: providing a small lot size semiconductor device manufacturing facility (col. 4, lines 42-53) having: a plurality of processing tools (col. 5, lines 8-14); and a high speed transport system adapted to transport small lot size substrate carriers among the processing tools (col. 7, lines 7-14); and maintaining a predetermined work in progress level within the small lot size semiconductor device manufacturing facility (col. 7, lines 53-56). Barto does disclose high/low priority lots (col. 13 and 14, lines 58-67 and 1-7) and reducing the cycle times for the high priority lots (col. 14, lines 8-14). Allen further illustrates the concept of higher priority lots having a lower cycle time (col. 9, lines 11-20). The Office asserts that Barto and Allen both implicitly disclose increasing the cycle time for low priority lots, since the low priority lots are required to wait until the high priority lots are processed. Barto does not expressly disclose having each small lot size substrate carrier adapted to transport more or fewer than 13 substrates. Also, Barto does not expressly disclose storing substrate carriers in substrate carrier locations.

Christensen does disclose a carrier adapted to transport more or fewer than 13 substrates (col. 1, lines 28-35) and storing substrate carriers in substrate carrier locations (col. 2, lines 40-51). The Examiner notes that “adapted to” is functional language; this means the carrier only has to have the ability to hold more or less than 13 substrates. Christensen clearly states that the carrier can hold anywhere from 0 to 25 substrates (col. 1, lines 26-35), thereby fulfilling the conditions for a “small lot size” and a “large lot size”.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use Christensen’s handling system within Barto’s semiconductor facility; implementing a transport adapted to hold more or fewer than 13 substrates and holding the

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carriers in stocking locations. One of ordinary skill in the art would have been motivated to do this since Christensen discloses a handling system that applies to any semiconductor plant, reduces cycle time and reduces the need for excessive handling of delicate wafers. Christensen also teaches cassettes to be common for substrate storage (col. 4, lines 53-56).


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles R. Kasenge whose telephone number is 571 272-3743. The examiner can normally be reached on Monday through Friday, 8:30 - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on 571 272-3749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CK
December 9, 2005



**LEO PICARD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100**